

# **Fiscal Year 2017 Revegetation Assessment**

November 2017



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**INL/EXT-17-43902**

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**November 2017**

**Idaho National Laboratory  
Idaho Falls, Idaho 83415**

**Prepared for the  
U.S. Department of Energy  
Office of Nuclear Energy, Science, and Technology  
Under DOE Idaho Operations Office  
Contract DE-AC07-05ID14517**



## **ABSTRACT**

This report summarizes the Fiscal Year (FY) 2017 sagebrush restoration efforts at the Idaho National Laboratory Site conducted by Idaho National Laboratory (INL) to verify compliance with the Department of Energy Idaho Operations Office (DOE-ID) policy for no net loss of sagebrush at the INL Site. This report provides the following information for projects at INL completed during FY 2017 that were identified during the National Environmental Policy Act (NEPA) review process as having the potential to disturb sagebrush:

- 1) A summary of projects identified for sagebrush restoration
- 2) A summary of restoration efforts.

In FY 2017, two INL projects required sagebrush restoration. For other projects, implementation of best management practices minimized impacts to vegetation and revegetation efforts were not required.



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## **ACRONYMS**

CCA	"Candidate Conservation Agreement for Greater Sage-grouse ( <i>Centrocercus urophasianus</i> ) on the Idaho National Laboratory Site"
CDRL	Contract Data Requirements List
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE-ID	Department of Energy Idaho Operations Office
EC	environmental checklist
ESER	Environmental Surveillance, Education, and Research
FY	Fiscal Year
IDAPA	Idaho Administrative Procedures Act
INL	Idaho National Laboratory
MCP	Management Control Procedure
NEPA	National Environmental Policy Act
USC	United States Code



# **Fiscal Year 2017 Revegetation Assessment**

## **Introduction**

Revegetation of disturbed areas at the Idaho National Laboratory (INL) Site is identified as a method for prevention and/or control of noxious weeds used to comply with some aspects of both federal (7 United States Code [USC] § 2814, 1994 and state (Idaho Administrative Procedures Act [IDAPA] 02.06.22, 2001 noxious weed control laws. Executive Order 13112, Invasive Species, also specifies revegetation as a control measure to limit the spread of invasive species. Moreover, in the “Candidate Conservation Agreement for Greater Sage-grouse (*Centrocercus urophasianus*) on the Idaho National Laboratory Site” (CCA) (DOE-ID & United States Fish and Wildlife Service, 2014) the Department of Energy Idaho Operations Office (DOE-ID) adopted a policy of no net loss of sagebrush from development activities at the INL Site in order to protect sage-grouse habitat. INL complies with the requirements of the CCA by requiring each project that disturbs sagebrush to replace an equal amount of sagebrush in restoration priority areas.

Beginning in fiscal year (FY) 2017, INL and the DOE-ID Environmental Surveillance, Education, and Research (ESER) contractor established a contract under which the ESER identifies sagebrush restoration and reports the amounts of required sagebrush restoration to the project and the INL Revegetation Technical Point of Contact. Individual projects fund sagebrush restoration, and the ESER contractor plants required amounts of sagebrush in restoration priority areas.

### **1.1 Purpose**

The purpose of this report is to comply with Contract Data Requirements List (CDRL) item number F.24 (Contract No. DE-AC07-05ID14517) by providing this revegetation assessment to DOE-ID.

### **1.2 Background**

In the past, revegetation efforts at the INL Site have been largely unsuccessful due to the arid climate and soil constraints. Disturbed sites, including revegetated sites, can take up to 30 years to recover to pre-disturbed conditions. Therefore, INL identifies and implements best management practices to reduce the need for revegetation efforts during the National Environmental Policy Act (NEPA) process (e.g., minimizing off-road vehicle travel, limiting soil disturbance to previously disturbed areas, mowing vegetation instead of grubbing, etc.). INL also works in consultation with the ESER contractor through the environmental checklist (EC) process to determine when project activities have the potential to result in soil disturbance and to identify when restoration is required.

In 2017, INL established a contract (Contract No. 0191330) with the ESER contractor under which the ESER contractor completes the following tasks:

- Identifies quantities of sagebrush disturbance for individual INL projects
- Plants sagebrush in quantities equal to that which is disturbed in priority restoration areas
- Monitors the success of sagebrush plantings
- Maintains sagebrush plantings to encourage successful re-establishment
- Reports sagebrush restoration activities in the ESER contractor annual CCA monitoring report.

Requirements are identified in project specific ECs, and implementation of requirements is funded by individual projects and completed by the ESER through contract (see attachment 1).

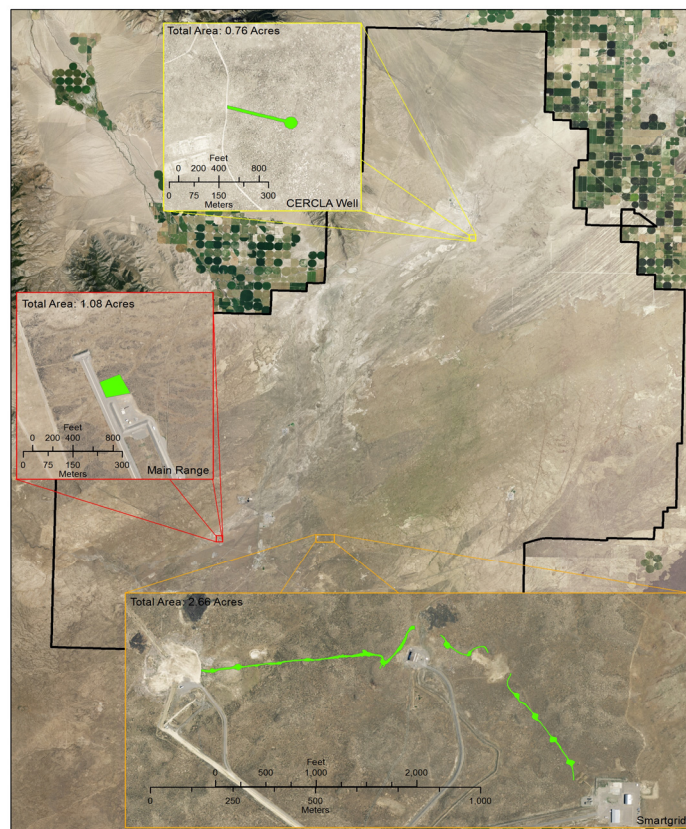
## Site Revegetation Assessment Summary

Management Control Procedure (MCP-8000 (Idaho National Laboratory, 2017) implements project specific revegetation. Section 4.117 of MCP-8000 requires projects that remove or disturb native or naturalized vegetation, disturb soil, or are located within the Sagebrush Steppe Reserve, Sage-Grouse Conservation Area, Critical Infrastructure Test Range Complex boundary, the area between the Specific Manufacturing Capability and Test Area North, or in the INL storm water corridor to conduct the following:

- Complete and obtain approval of an EC for NEPA documentation
- Work with the appropriate Program Environmental Lead to identify permits, permit modifications or licenses needed for the activity
- Coordinate with DOE-ID's ESER contractor for a biological resource review to determine the need for vegetation restoration efforts.

Figure 1 shows projects at the INL Site that required sagebrush restoration activities in FY 2017.

Figure 1. Location and acreage of activities at the INL Site that required sagebrush restoration in FY 2017



The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) well location shown in Figure 1 is not an INL project and is not included in this assessment. The ESER

contractor completed planting for the Main Range and Smart Grid October 10-14, 2017 in an area disturbed by the 2010 Jefferson Fire off the T-4 road (Hafla, 2017).

In addition, INL completed reseeding at the Remote Handled Low Level Waste Facility in 2017. This location will be added to list of areas monitored by Facility and Site Services in accordance with PLN-611 (INL, 2013) for control of invasive and noxious species.

## **Recommendations**

INL must annually report the number of disturbed and restored acres of sagebrush to DOE-ID to verify compliance with the CCA. In 2016, BEA began tracking sagebrush disturbance and other revegetation requirements for the annual report through the EC process. The contract between INL and the ESER contractor for sagebrush restoration will continue for the foreseeable future. Therefore, INL recommends future revegetation efforts be reported in the annual sagebrush report to DOE-ID and that CDRL F.24 be cancelled due to the redundant information contained in both reports.



## References

- 7 USC § 2814. (1994). Management of Undesirable Plants on Federal Lands. United States Code.
- Anderson, J. E., & Shumar, M. L. (1989). *Guidelines for Revegetation of Disturbed Sites at the Idaho National Engineering Laboratory*. Idaho Falls, ID: DOE-ID.
- Anderson, J., Ruppel, K. T., Glennon, J. M., Holt, G. E., & Rope, R. C. (1996). *Plant Communities, Ethnoecology, and Flora of the Idaho National Engineering Laboratory ESRF-005*. Idaho Falls, ID.
- Contract No. 0191330. (2017).
- Contract No. DE-AC07-05ID14517. (n.d.).
- DOE-ID, & United States Fish and Wildlife Service. (2014). *Candidate Conservation Agreement for Greater Sage-grouse (Centrocercus urophasianus) on the Idaho National Laboratory Site DOE/ID-11514*. Idaho Falls, ID: U.S. Department of Energy, Idaho Operations Office.
- Hafla, J. (2017, October 16). Email : Sagebrush Planting . Idaho Falls, ID.
- Idaho National Laboratory . (2017). *MCP-8000 Environmental Compliance Manual*.
- IDAPA 02.06.22. (2001, March 30). Noxious Weed Rules. *Idaho Administrative Procedures Act*.
- INL. (2013). Sitewide Noxious Weed Management . *PLN-611*. Idaho Falls, ID: Idaho National Laboratory.



## **Attachment 1**





WASTREN ADVANTAGE, INC

Invoice Number: INV-0000130980  
Invoice Date: 09/27/17

Bill To:  
Battelle Energy Alliance  
2525 Fremont Avenue  
PO Box 1625  
Idaho Falls, ID 83415

Remit To:  
Wastren Advantage  
Attn: Accounts Receivable  
1571 Shyville Road  
Piketon, OH 45661

Terms: NET 30  
Due Date: 10/27/17  
Project Number: NSTR.004

Contract No: 0191330  
Invoice Total: \$19,748.00  
Description: Sagebrush Restoration

Sagebrush Restoration

Invoice Total

\$19,748.00  
\$19,748.00

**RECEIVED**

By Juanita Hernandez at 3:41 pm, Sep 27, 2017